

# SPU/SDoT Design Drafting Guidelines

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These checklists are designed to guide you through Seattle Public Utilities' design drafting process. There is no guarantee that the links below are unbroken; contact your SPU representative for the latest information.

## During 30% Design Development

- ☐ Download CAD support files at: [http://www.seattle.gov/util/Engineering/CAD\\_Resources/](http://www.seattle.gov/util/Engineering/CAD_Resources/)
- ☐ Become familiar with the latest version of the [CAD Manual](#).
- ☐ Setup project folders and drawings (see Section 3 of the [CAD Manual](#)).
  - ☐ Set up sheet drawings with PE stamps.
  - ☐ Create cover sheet.
    - ☐ Vicinity Map
    - ☐ Location Map
    - ☐ Sheet Index
    - ☐ Datum Block (if applicable)
    - ☐ Detail & Section Referencing Block
  - ☐ Create notes sheet (see [SIP web page](#) for sample notes).
  - ☐ Setup survey control drawing with PLS stamp.
  - ☐ Set up a "view" drawing (XREF) that contains match lines on even stations and model space views. This drawing will be used to save-as and create all other plan/profile XREFs.
  - ☐ XREF base map into sheets and create plan viewports based on the "view" drawing using Sheet Set Manager.
  - ☐ Create design XREFs (save-as the "view" drawing to create each design drawing).
    - ☐ Layout the design under the direction of the project engineer.
    - ☐ Create profiles (with match lines that match stationing on plan) if required.
    - ☐ Add annotation based on planned viewport scale(s).
  - ☐ Overlay design XREFs in sheets and create viewports for profiles if required.
- ☐ Check SPU Design Standards & Guidelines for 30% drawing requirements.
- ☐ Check and plot drawing set for interdepartmental plans circulation (make PDF and DWF snapshots) per Section 8 of the [CAD Manual](#).
- ☐ Send the DWG files, PDF file and DWF file to Project Manager for review per Section 10 of the [CAD Manual](#).

## During 60% Design Development

- ☐ Continue developing the drawings under the direction of the project engineer.
  - ☐ Track and log changes during design development.
  - ☐ Check design sketch for constructability throughout drafting progress, remind designer of any noted interference or constructability concerns.
- ☐ Follow the drafting & presentation guidelines (see Section 4 of the [CAD Manual](#)).
  - ☐ Setup detail numbers and titles using Sheet Set Manager (add cross-referencing blocks containing fields linked to Sheet Set Manager).
  - ☐ Lock Viewports.
- ☐ Acquire Vault Plan Index (VPI) number from SPU [Engineering Records Center](#) (Records Vault).
- ☐ If SIP required, ensure drawings meet the [60% SIP checklist requirements](#).
- ☐ Check SPU Design Standards & Guidelines for 60% drawing requirements.
- ☐ Check and plot drawing set for interdepartmental plans circulation (make PDF and DWF snapshots) per Section 8 of the [CAD Manual](#).
- ☐ Send the DWG files, PDF file and DWF file to Project Manager for review per Section 10 of the [CAD Manual](#).

## During 90% Design Development

- ☐ Go through the checklists in Section 4 of the [CAD Manual](#).
- ☐ Prepare utility linework per Section 6 of the [CAD Manual](#).
- ☐ If SIP required, ensure drawings meet the [90% SIP checklist requirements](#).
- ☐ Check SPU Design Standards & Guidelines for 90% drawing requirements.
- ☐ Check and plot drawing set for interdepartmental plans circulation (make PDF and DWF snapshots) per Section 8 of the [CAD Manual](#).
- ☐ Send the DWG files, PDF file and DWF file to Project Manager for review per Section 10 of the [CAD Manual](#).

## At 100% or Time of Advertisement

- ☐ Clean up network project folder; delete erroneous drawing files & blocks not used, back up files, etc.
  - ☐ Archive the drawings
- ☐ Prepare drawings & data per Section 10 of the [CAD Manual](#) and transmit to Project Manager.
  - ☐ Create 100% PDF snapshot (using “DWG To PDF.pc3”) for reference
  - ☐ Create 100% DWF snapshot for comparison against earlier submittals
- ☐ Send design data and copies of the advertised drawing set for construction staking/field verification.
  - ☐ LandXML of proposed pipe alignments/profiles (inverts) and proposed surfaces.
  - ☐ 1 full-size and 2 half-size prints.
- ☐ Setup a “lessons learned” meeting to celebrate accomplishments and discuss opportunities for improvement.